

LICENSE AMENDMENT REQUEST
RELATED TO PROPOSED EMERGENCY PLAN CHANGES
FOR THE NEXTERA ENERGY DUANE ARNOLD, LLC
DUANE ARNOLD ENERGY CENTER
DOCKET NUMBER 50-331

By application dated June 28, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21179A286), NextEra Energy Duane Arnold, LLC (NEDA), requested approval by the U.S. Nuclear Regulatory Commission (NRC) of proposed changes to the Duane Arnold Energy Center (DAEC) Permanently Defueled Emergency Plan (PDEP) pursuant to Section 50.54(q) to Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed changes replace the DAEC PDEP and associated Emergency Action Level (EAL) Technical Bases Document with the Independent Spent Fuel Storage Installation (ISFSI) Only Emergency Plan (IOEP) and associated EAL scheme to support the operation of the DAEC ISFSI.

As part of the NRC staff's review of the proposed changes, the NRC staff used the proposed PDEP and EAL scheme, as approved in letter dated April 28, 2021 (ADAMS Accession No. ML21098A166), as the "approved DAEC PDEP" and "approved EAL scheme." Specifically, the NRC staff used the proposed PDEP as provided in letter dated December 1, 2020 (ADAMS Accession No. ML20337A147) and the proposed EAL scheme as provided in the letter dated May 15, 2020 (ADAMS Accession No. ML20136A438). The following requests for additional information (RAIs) to facilitate the technical review being conducted by the Division of Preparedness and Response, Reactor Licensing Branch staff. Timely and accurate response to these draft RAIs is requested.

DAEC RAI 1

Requirement:

- 10 CFR 50.47(b)(4), as exempted, requires a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion D.1 states that an emergency classification and EAL scheme must be established by the licensee.

Issue:

Section D.1.2, "Postulated Accidents," of the proposed DAEC IOEP states,

The **Defueled Safety Analysis Report (DSAR)** describes the postulated accidents applicable to DAEC. [emphasis added]

However, Section H.1.1, "Emergency Response Facility (ERF)," of the proposed DAEC IOEP states,

Radiological condition resulting from the design basis accidents specified in the ISFSI **UFSAR** [Updated Final Safety Analysis Report] do not inhibit staffing of the ERF. [emphasis added]

Request:

Please address this inconsistency.

DAEC RAI 2

Requirement:

- 10 CFR 50.47(b)(12) requires that arrangements are made for medical services for contaminated injured individuals.
- 10 CFR Part 50, Appendix E.IV.E.6 requires arrangements for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion F.2 states that each licensee shall ensure that a coordinated communication link for medical support exists.

Issue:

The approved DAEC PDEP, Section F.1.3, "Medical Communications," states:

Communications with the ambulance will be accomplished through the use of the Linn County fire frequency radio network.

This information was included in the approved DAEC PDEP as a response to RAI-NSIR-03 in letter dated December 1, 2020 (ADAMS Accession No. ML20337A147).

Request:

Please provide a justification for why the communications link for medical support was removed from the proposed DAEC IOEP.

DAEC RAI 3

Requirement:

- 10 CFR 50.47(b)(6), as exempted, requires provisions for prompt communications among principal response organizations to emergency personnel.
- 10 CFR 50.47(b)(10), as exempted, requires a range of protective actions has been developed for emergency workers and the public.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion J.1 states that each licensee shall establish the means and time required to warn or advise onsite individuals and individuals who may be in areas controlled by the operator, including:
 - a. employees not having emergency assignments;
 - b. visitors;
 - c. contractor and construction personnel; and
 - d. other persons who may be in the public access areas on or passing through the site or within the owner controlled area.

Issue:

Section F.1.2.1 "DAEC Paging Systems," of the approved DAEC PDEP states,

The Protected Area paging system (Gai-tronics) provides a means of intra-plant communications. Stations on this system provide access to the paging system and to intercom lines. These stations and speakers are placed throughout the facility including the Control Room. Buildings outside of the Protected Area also have public address announcing capabilities. Access to the public address system in both locations can be accomplished via the site's telephone system. This system can be used to notify personnel of an emergency.

Additionally, Section J.1.1, "Accountability," of the proposed DAEC IOEP states,

Accountability should be considered and used as a protective action whenever a sitewide risk to health and safety exists and prudence dictates. If personnel accountability is required, at the direction of the Emergency Director, all individuals at the site (including non-essential employees, visitors, and contractor personnel) shall be notified by sounding the **facility alarm** and making announcements over the **Public Address System**. Following announcement of an emergency declaration, and when accountability has been requested, facility personnel are responsible for reporting to designated areas and aiding Security in the accountability process. [emphasis added]

However, Section F, "Emergency Communications," of the proposed DAEC IOEP does not reference the "facility alarm" or the "Public Address System."

Request:

Please provide a justification for removal of the Public Address System as a notification method in the proposed DAEC IOEP.

DAEC RAI 4

Requirement:

- 10 CFR 50.47(b)(16), requires responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.
- 10 CFR Part 50, Appendix E.IV.G. requires provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date shall be described.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion P.10 states that the process for reviewing and updating contact information identified in the emergency plan and implementing procedures is described and implemented quarterly.

Issue:

The approved DAEC PDEP, Section P.1.1.2, "Emergency Planning Documents," states,

The DAEC emergency telephone directory will be maintained and updated **quarterly**. [emphasis added]

The proposed DAEC IOEP, Section P.1.1.2 states,

The DAEC emergency telephone directory will be maintained and updated **annually**. [emphasis added]

Request:

Please provide a justification for why the frequency of the maintenance and update of the telephone directory has been modified from quarterly to annually.

DAEC RAI 5

Requirement:

- 10 CFR 50.47(b)(4), as exempted, requires a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion D.1 states that an emergency classification and EAL scheme must be established by the licensee.

Issue:

Table 1, "Emergency Plan Initiating Conditions Being Changed or Deleted," of the Enclosure, "Description and Assessment of the Proposed Changes," states,

PD-HU1 Confirmed SECURITY CONDITION or threat at the ISFSI

However, PD-HU1 in Attachment 2, "ISFSI Only Emergency Action Level and Technical Bases Document," states,

Confirmed SECURITY CONDITION or threat.

Request:

Please address this inconsistency.

DAEC RAI 6

Requirement:

- 10 CFR 50.47(b)(4), as exempted, requires a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion D.1 states that an emergency classification and EAL scheme must be established by the licensee.

Issue:

Section 6.1, "Definitions," the approved DAEC EAL scheme states,

HOSTAGE: A person(s) held as leverage against the licensee to ensure that demands will be met by the plant.

However, this term is not provided in the definition section of the proposed EAL scheme but is defined in the basis for PD-HA1.

Request:

Please provide justification for why the term is not required in the definition section of the proposed EAL scheme.

DAEC RAI 7

Requirement:

- 10 CFR 50.47(b)(4), as exempted, requires a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee.
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion D.1 states that an emergency classification and EAL scheme must be established by the licensee.

Issue:

EAL PD-HU3.1 of the proposed EAL scheme states, in part,

...further degradation of systems needed to maintain spent fuel cooling occurs.

Request:

Please review the proposed EAL as written and consider revising it as necessary to reflect the storage of spent fuel in dry cask storage.